List of Claims:

Claim 1 (original): A method for depositing micro-lenses on a semiconductive circuit comprising the steps of:

successively applying a plurality of coats of micro-lens suitable material to the surface of a semiconductive circuit wherein the current coat is imparted with a succeeding one of a plurality of lens formation patterns;

removing unwanted portions of the current coat of micro-lens suitable material; and

forming a plurality of micro-lenses from the remaining portion of the current coat of micro-lens suitable material.

Claim 2 (original): The method of Claim 1 wherein the step of imparting the current coat with one of a plurality of lens formation patterns is accomplished by:

placing a formation mask that embodies one of the plurality of lens formation patterns proximate to the current coat of micro-lens suitable material; and

aligning the formation mask to the semiconductive circuit;

irradiating the formation mask.

Claim 3 (original): The method of Claim 1 wherein the plurality of lens formation patterns are alternate counterparts of each other.

Claim 4 (original): A method for depositing micro-lenses on a semiconductive circuit comprising the steps of:

applying a first coat of micro-lens suitable material to the surface of a semiconductive circuit;

imparting a first lens formation pattern onto the first coat of micro-lens suitable material;

removing unwanted portions of the first coat of micro-lens suitable material;

forming a first plurality of micro-lenses from the remaining first coat of micro-lens suitable material;

applying a second coat of micro-lens suitable material to the semiconductive circuit;

imparting a second lens formation pattern to the second coat of micro-lens suitable material;

removing unwanted portions of the second coat of photo-resist; and

forming a second plurality of micro-lenses from the remaining second coat of micro-lens suitable material.

Claim 5 (original): The method of Claim 4 wherein the first and second lens formation patterns are alternate counterparts of each other.

Claim 6 (original): The method of Claim 5 wherein the first and second lens formation patterns comprise rectangular regions in a checkerboard pattern.

Claim 7 (original): The method of Claim 6 wherein rectangular regions comprise broken corners to avoid continuity with neighboring regions.

Claim 8 (original): The method of Claim 4 wherein the step of forming the first and second plurality of micro-lenses comprise the steps of:

raising the temperature of the micro-lens suitable material in order to relieve the surface tension thereof;

allowing the micro-lens suitable material to reflow in order to achieve a desired lens focal length; and

reducing the temperature of the micro-lens suitable material in order to preserve the achieved lens focal length.

Claim 9 (original): The method of Claim 1 wherein the step of applying the first and second coats of micro-lens suitable material comprise the step of spin coating a micro-lens suitable material onto the semiconductive circuit.

Claim 10 (original): The method of Claim 1 wherein the step of imparting the a first lens formation pattern onto the first coat of micro-lens suitable material comprises the steps of:

placing a first formation mask comprising the first lens formation pattern proximate to the first coat of micro-lens suitable material;

aligning the first formation mask relative to the semiconductive circuit; and

illuminating the first formation mask with radiation.

Claim 11 (original): A method for depositing micro-lenses on a semiconductive circuit comprising the steps of:

applying a first coat of micro-lens suitable material to the surface of the semiconductive circuit;

imparting a first lens formation pattern onto the first coat of micro-lens suitable material;

removing unwanted portions of the first coat of micro-lens suitable material;

applying a second coat of micro-lens suitable material to the to the surface of the semiconductive circuit;

imparting a second lens formation pattern onto the second coat of micro-lens suitable material; .

removing unwanted portions of the second coat of micro-lens suitable material; and

forming a plurality of micro-lenses from the remaining portions of the first and second coats of micro-lens suitable material.

Claim 12 (canceled)

Claim 13 (currently amended): A micro-lens structure comprising:

a plurality of micro-lenses disposed proximate to radiation sensitive active regions formed in a semiconductive circuit located wherein each active region is formed within a boundary region perimeter;

wherein each micro-lens is formed from an island of micro-lens suitable material deposited onto the surface of the semiconductive circuit,

wherein each island of micro-lens suitable material occupies an area within the boundary region larger than a resolution setback relative to the perimeter of the boundary region, and

~~The micro-lens structure of Claim 12~~ wherein the islands of micro-lens suitable material are deposited onto the surface of the semiconductive material and wherein the micro-lenses are formed by:

successively applying a plurality of coats of micro-lens suitable material to the surface of a semiconductive circuit wherein the current coat is imparted with one of a plurality of lens formation patterns;

removing unwanted portions of the current coat of micro-lens suitable material; and

forming a plurality of micro-lenses from the remaining portion of the current coat of micro-lens suitable material.

Claim 14 (original): The micro-lens structure of Claim 13 wherein the step of imparting the current coat with one of a plurality of lens formation patterns is accomplished by:

placing a formation mask that embodies one of the plurality of lens formation patterns proximate to the current coat of micro-lens suitable material; and

aligning the formation mask to the semiconductive circuit;

irradiating the formation mask.

Claim 15 (currently amended): The ~~method~~ <u>micro-lens structure</u> of Claim 13 wherein the plurality of lens formation patterns are alternate counterparts of each other.

Claim 16 (currently amended): <u>A micro-lens structure comprising:</u>

<u>a plurality of micro-lenses disposed proximate to radiation sensitive active regions formed in a semiconductive circuit located wherein each active region is formed within a boundary region perimeter;</u>

<u>wherein each micro-lens is formed from an island of micro-lens suitable material deposited onto the surface of the semiconductive circuit,</u>

<u>wherein each island of micro-lens suitable material occupies an area within the boundary region larger than a resolution setback relative to the perimeter of the boundary region, and</u>

~~The micro-lens structure of Claim 12~~ wherein the islands of micro-lens suitable material are deposited onto the surface of the semiconductive material and wherein the micro-lenses are formed by:

applying a first coat of micro-lens suitable material to the surface of the semiconductive circuit;

imparting a first lens formation pattern onto the first coat of micro-lens suitable material;

removing unwanted portions of the micro-lens suitable material;

forming a first plurality of micro-lenses from the remaining portion of the first coat of micro-lens suitable material;

applying a second coat of photo-resist to the semiconductive circuit;

imparting a second lens formation pattern onto the second coat of micro-lens suitable material;

removing unwanted portions of the micro-lens suitable material; and

forming a second plurality of micro-lenses from the remaining portion of the second coat of micro-lens suitable material.

Claim 17 (original): The micro-lens structure of Claim 16 wherein application of the first and second coats of from the remaining portion of the first coat of micro-lens suitable material is accomplished through a spin coating process.

Claim 18 (original): The micro-lens structure of Claim 16 wherein the imparting of a first lens formation pattern onto the first coat of micro-lens suitable material is accomplished by:

placing a first formation mask comprising the first lens formation pattern proximate to the first coat of micro-lens suitable material;

aligning the first formation mask relative to the semiconductive circuit; and

illuminating the first formation mask with radiation.

Claim 19 (original): The micro-lens structure of Claim 16 wherein the first and second lens formation patterns are alternate counterparts of each other.

Claim 20 (original): The micro-lens structure of Claim 19 wherein the first and second lens formation patterns comprise rectangular regions in a checkerboard pattern.

Claim 21 (original): The micro-lens structure of Claim 20 wherein rectangular regions comprise broken corners to avoid continuity with neighboring regions.

Claim 22 (currently amended): A micro-lens structure comprising:

a plurality of micro-lenses disposed proximate to radiation sensitive active regions formed in a semiconductive circuit located wherein each active region is formed within a boundary region perimeter;

wherein each micro-lens is formed from an island of micro-lens suitable material deposited onto the surface of the semiconductive circuit,

wherein each island of micro-lens suitable material occupies an area within the boundary region larger than a resolution setback relative to the perimeter of the boundary region, and

~~The method of Claim 12~~ wherein the micro-lenses are formed by:

raising the temperature of the islands of micro-lens suitable material in order to relieve the surface tension thereof;

allowing the islands of micro-lens suitable material to reflow in order to achieve a desired lens focal length; and

reducing the temperature of the islands of micro-lens suitable material in order to preserve the achieved lens focal length.

Claim 23 (canceled)

Claim 24 (currently amended): A semiconductive circuit image sensor comprising:

surface;

a plurality of radiation sensitive active regions disposed in the surface wherein each active regions is encompassed by a boundary perimeter;

sensing circuitry to sense the state of the plurality of active regions;

a plurality of micro-lenses disposed proximate to and coincident with the plurality of active regions;

wherein each micro-lens is formed from an island of micro-lens suitable material deposited onto the surface of the semiconductive circuit,

wherein each island of micro-lens suitable material occupies an area within the boundary region larger than a resolution setback relative to the perimeter of the boundary region, and

~~The micro-lens structure of Claim 23~~ wherein the islands of micro-lens suitable material are deposited onto the surface of the semiconductive material and wherein the micro-lenses are formed by:

successively applying a plurality of coats of micro-lens suitable material to the surface of a semiconductive circuit wherein the current coat is imparted with one of a plurality of lens formation patterns;

removing unwanted portions of the current coat of micro-lens suitable material; and

forming a plurality of micro-lenses from the remaining portion of the current coat of micro-lens suitable material.

Claim 25 (original): The micro-lens structure of Claim 24 wherein the step of imparting the current coat with one of a plurality of lens formation patterns is accomplished by:

placing a formation mask that embodies one of the plurality of lens formation patterns proximate to the current coat of micro-lens suitable material; and

aligning the formation mask to the semiconductive circuit;

irradiating the formation mask.

Claim 26 (currently amended): The ~~method~~ micro-lens structure of Claim 24 wherein the plurality of lens formation patterns are alternate counterparts of each other.

Claim 27 (currently amended): A semiconductive circuit image sensor comprising:

surface;

a plurality of radiation sensitive active regions disposed in the surface wherein each active regions is encompassed by a boundary perimeter;

sensing circuitry to sense the state of the plurality of active regions;

a plurality of micro-lenses disposed proximate to and coincident with the plurality of active regions;

wherein each micro-lens is formed from an island of micro-lens suitable material deposited onto the surface of the semiconductive circuit,

wherein each island of micro-lens suitable material occupies an area within the boundary region larger than a resolution setback relative to the perimeter of the boundary region, and

~~The semiconductive image sensor of Claim 23~~ wherein the islands of micro-lens suitable material are deposited onto the surface of the semiconductive material and wherein the micro-lenses are formed by:

applying a first coat of micro-lens suitable material to the surface of the semiconductive circuit;

imparting a first lens formation pattern onto the first coat of the micro-lens suitable material;

removing unwanted portions of the first coat of micro-lens suitable material;

forming a first plurality of micro-lenses from the remaining portion of the first coat of micro-lens suitable material;

applying a second coat of the micro-lens suitable material to the semiconductive circuit;

imparting a second lens formation pattern onto the second coat of the micro-lens suitable material;

removing unwanted portions of the second coat of micro-lens suitable material; and

forming a second plurality of micro-lenses from the remaining portion of the second coat of micro-lens suitable material.

Claim 28 (original): The micro-lens structure of Claim 27 wherein application of the first and second coats of micro-lens suitable material is accomplished through a spin coating process.

Claim 29 (original): The micro-lens structure of Claim 27 wherein imparting a first lens formation pattern onto the first coat of micro-lens suitable material is accomplished by:

placing a first lens formation mask comprising the first lens formation pattern proximate to the first coat of micro-lens suitable material;

aligning the first lens formation mask relative to the semiconductive circuit; and

illuminating the first lens formation mask with radiation.

Claim 30 (original): The micro-lens structure of Claim 27 wherein the first and second lens formation patterns are alternate counterparts of each other.

Claim 31 (original): The micro-lens structure of Claim 30 wherein the first and second lens formation patterns comprise rectangular regions in a checkerboard pattern.

Claim 32 (original): The micro-lens structure of Claim 31 wherein rectangular regions comprise broken corners to avoid continuity with neighboring regions.